

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 101055-1 WO	<b>FOR FURTHER ACTION</b>	
	See item 4 below	
International application No. PCT/SE2004/000696	International filing date ( <i>day/month/year</i> ) 06 May 2004 (06.05.2004)	Priority date ( <i>day/month/year</i> ) 09 May 2003 (09.05.2003)]
International Patent Classification (IPC) or national classification and IPC <sup>7</sup> C07D 471/04, A61K 31/437, A61P 11/06, 37/00, 19/02, 29/00		
Applicant ASTRAZENECA AB		

<p>1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p>In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.</p>																								
<p>3. This report contains indications relating to the following items:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;"><input checked="" type="checkbox"/></td> <td>Box No. I</td> <td>Basis of the report</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table> <p>4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).</p>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input checked="" type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input checked="" type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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<p>The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No. +41 22 740 14 35</p>	<p>Date of issuance of this report 11 November 2005 (11.11.2005)</p> <p>Authorized officer <b>Philippe Becamel</b></p> <p>Telephone No. +41 22 338 70 90</p>
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**PATENT COOPERATION TREATY**

From the  
INTERNATIONAL SEARCHING AUTHORITY

REC'D 26 AUG 2004  
WIPO  
PCT

To:

Global Intellectual Property  
AstraZeneca AB  
151 85 Södertälje

**PCT**

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing  
(day/month/year)

**23 -08- 2004**

Applicant's or agent's file reference <b>101055-1 WO</b>		FOR FURTHER ACTION See paragraph 2 below	
International application No. <b>PCT/SE2004/000696</b>	International filing date (day/month/year) <b>06.05.2004</b>	Priority date (day/month/year) <b>09.05.2004</b>	
International Patent Classification (IPC) or both national classification and IPC <b>C07D 471/04, A61K 31/437, A61P 11/06, 37/00, 19/02, 29/00</b>			
Applicant <b>AstraZeneca AB et al</b>			

**I. This opinion contains indications relating to the following items:**

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

**2. FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later. For further opinions, see Form PCT/ISA/220.

**3. For further details, see notes to Form PCT/ISA/220.**

Name and mailing address of the ISA/SE  
Patent- och registreringsverket  
Box 5055  
S-102 42 STOCKHOLM  
Facsimile No. +46 8 667 72 88

Authorized officer

Fernando Farieta/EÖ  
Telephone No. +46 8 782 25 00

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.  
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Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
 This opinion has been established on the basis of a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material  
 a sequence listing  
 table(s) related to the sequence listing
  - b. format of material  
 in written format  
 in computer readable form
  - c. time of filing/furnishing  
 contained in the international application as filed.  
 filed together with the international application in computer readable form.  
 furnished subsequently to this Authority for the purposes of search.
3.  In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.  
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**Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

The question whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

- the entire international application  
 claims Nos. 9-10

because:

- the said international application, or the said claims Nos. 9-10 relate to the following subject matter which does not require an international preliminary examination (*specify*):

See PCT Rule 67.1.(iv).: Methods for treatment of the human or animal body by surgery or therapy, as well as diagnostic methods.

- the description, claims or drawings (*indicate particular elements below*) or said claims Nos. \_\_\_\_\_ are so unclear that no meaningful opinion could be formed (specify):
- the claims, or said claims Nos. \_\_\_\_\_ are so inadequately supported by the description that no meaningful opinion could be formed.
- no international search report has been established for said claims Nos. \_\_\_\_\_
- the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:
- the written form       has not been furnished  
                                 does not comply with the standard
- the computer readable form       has not been furnished  
                                 does not comply with the standard
- the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.
- See Supplemental Box for further details.

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No. <b>PCT/SE2004/000696</b>
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<b>Box No. V</b>	<b>Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</b>																										
<p><b>1. Statement</b></p> <table> <tr> <td>Novelty (N)</td> <td>Claims</td> <td><u>1-8 and 11</u></td> <td>YES</td> </tr> <tr> <td></td> <td>Claims</td> <td>_____</td> <td>NO</td> </tr> <tr> <td>Inventive step (IS)</td> <td>Claims</td> <td><u>1-8 and 11</u></td> <td>YES</td> </tr> <tr> <td></td> <td>Claims</td> <td>_____</td> <td>NO</td> </tr> <tr> <td>Industrial applicability (IA)</td> <td>Claims</td> <td><u>1-8 and 11</u></td> <td>YES</td> </tr> <tr> <td></td> <td>Claims</td> <td>_____</td> <td>NO</td> </tr> </table>				Novelty (N)	Claims	<u>1-8 and 11</u>	YES		Claims	_____	NO	Inventive step (IS)	Claims	<u>1-8 and 11</u>	YES		Claims	_____	NO	Industrial applicability (IA)	Claims	<u>1-8 and 11</u>	YES		Claims	_____	NO
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<p><b>2. Citations and explanations:</b></p> <p>Documents cited in the International Search Report:</p> <p>D1: US5389509 A  D2: US5338849 A  D3: WO0147922 A2</p> <p>The cited documents represent the general state of the art. The invention defined in claims 1-8 and 11 is not disclosed by any of these documents.</p> <p>The cited prior art does not give any indication that would lead a person skilled in the art to the claimed azaindoles. Therefore, the claimed invention is not obvious to a person skilled in the art.</p> <p>Accordingly, the invention defined in claims 1-8 and 11 is novel and is considered to involve an inventive step. The invention is industrially applicable.</p>																											

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.  
PCT/SE2004/000696

Box No. VII Certain defects in the international application

The following defects in the form or content of the international application have been noted:

Claims 1 and 11.

Defect on the general formula I comprise a nitrogen atom (N-) in the pyrrolring lacking a hydrogen atom (H-).

The definition for "Ar" is unclear.